AMENDMENTS TO THE CLAIMS

Claims 1-49 are pending in the instant application, of which claims 3 and 22-24 have been cancelled, and claims 42-49 are new claims. Claims 1, 18, 26, 33, 36 and 39 are independent. Claims 2, 4-17, 42-45, 19-21, 25, 27-32, 46-49, 34-35, 37-38 and 40-41, depend directly or indirectly from independent claims 1, 18, 26, 33, 36 and 39, respectively. Claims 1-2, 4-21, 25-27, 28-37 and 39-40 have been amended to clarity the claim language. The Applicant submits that the claims 1-2, 4-21 and 25-49 define patentable subject matter in view of the following remarks and arguments.

Listing of claims:

1. (Currently Amended) A ~~data center~~ communication system, comprising:

a first tier comprising a first server, the first server comprising a first single integrated convergent network controller chip;

a second tier coupled to the first tier via a single fabric coupled to a single connector, the second tier comprising a second server, the second server comprising a second single integrated convergent network controller chip; and

a third tier coupled to the second tier via the single fabric coupled to the single connector, the third tier comprising a third server, the third server comprising a third single integrated convergent network controller chip,

wherein ~~one or more of~~ the first server, the second server and/~~or~~ the third server ~~handles~~ process, respectively via the first single integrated convergent

network controller chip, the second single integrated convergent network controller chip and the third single integrated convergent network controller chip, a plurality of different traffic types concurrently over [[a]] the single fabric that is coupled to the ~~using~~ [[a]] single connector.

2. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the first server ~~handles~~ processes via the first single integrated convergent network controller chip, at least network traffic and direct attached storage (DAS) traffic over the single fabric.

3. (Cancelled)

4. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the second server ~~handles~~ processes via the second single integrated convergent network controller chip at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

5. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the second single integrated convergent network controller chip of the second server ~~uses a single controller for handling~~ processes at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

6. (Currently Amended) The ~~data center~~ communication system according to claim 5, wherein the storage traffic comprises traffic from a redundant-array-of-independent-disks (RAID) configuration or traffic from storage devices accessible via a network over the single fabric.

7. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the second tier comprises an application tier.

8. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the third server ~~handles~~ processes via the third single integrated convergent network controller chip at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

9. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the third single integrated convergent network controller chip of the third server ~~uses a single controller for handling~~ processes at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

10. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the single fabric ~~is based upon~~ operates utilizing an OSI layer 2 (L2) protocol.

11. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the single fabric ~~is based upon~~ operates utilizing an Ethernet protocol.

12. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein the single fabric ~~is based upon~~ operates utilizing an OSI transport layer and/or network layer protocol.

13. (Currently Amended) The ~~data center~~ communication system according to claim 12, wherein the OSI transport layer and/or network layer protocol comprises [[a]] transmission control protocol/Internet protocol (TCP/IP).

14. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein one or more of the first server, the second server and/or the third server uses an Internet small computer system interface (iSCSI) protocol in communicating with a storage device over the single fabric.

15. (Currently Amended) The ~~data center~~ communication system according to claim 14, wherein the iSCSI protocol runs on top of TCP/IP.

16. (Currently Amended) The ~~data center~~ communication system according to claim 14, wherein the iSCSI protocol runs on top of remote direct memory access protocol (RDMAP).

17. (Currently Amended) The ~~data center~~ communication system according to claim 1, wherein one or more of the first server, the second server and/or the third server uses an RDMAP ~~for~~ to process interprocess communication.

18. (Currently Amended) A network communication system, comprising:

[[an]] a single integrated convergent network controller chip; and

a single Ethernet connector for handling a plurality of different types of network traffic transported via a single fabric, wherein:

the single Ethernet connector is coupled to the single integrated convergent network controller chip; ~~, wherein the Ethernet connector and~~

the single fabric is coupled to a plurality of servers;

the single integrated convergent network controller chip is operable to ~~can~~ concurrently ~~handle~~ process [[a]] the plurality of different types of network traffic, for the plurality of servers, which is transported via [[a]] the single fabric.

19. (Currently Amended) The ~~server~~ network communication system according to claim 18, wherein:

~~wherein the server~~ the plurality of servers comprises a blade server, and

~~wherein~~ the single integrated convergent network controller chip is part of a blade mounted in the blade server.

20. (Currently Amended) The ~~server~~ network communication system according to claim 18, wherein the blade server has a single Internet protocol (IP) address.

21. (Currently Amended) The ~~server~~ network communication system according to claim 18, wherein the server is part of a data center, and the data center comprises a plurality of other servers coupled to each other via the single fabric.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Currently Amended) The ~~server~~ network communication system according to claim 18, wherein the plurality of different types of traffic comprises at least two of network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

26. (Currently Amended) A method for communication, the method comprising:

routing a plurality of different types of traffic for a plurality of servers via a single fabric comprising a single OSI layer 2 (L2) connector, wherein each of said plurality of servers comprises a single integrated convergent network controller chip; and

concurrently ~~handling~~ processing the plurality of different types of traffic for the plurality of servers, which is routed via the single fabric and the single L2 connector, utilizing the single integrated convergent network controller chip within the plurality of servers.

27. (Previously Presented) The method according to claim 26, wherein the single fabric comprises an Ethernet-based fabric.

28. (Currently Amended) The method according to claim 26, wherein the single fabric comprises an OSI transport layer protocol and/or network layer protocol-based fabric.

29. (Currently Amended) The method according to claim 26, ~~wherein routing said plurality of different types of traffic for said server comprises~~ comprising accessing a storage device via the single fabric and the single L2 connector.

30. (Currently Amended) The method according to claim 26, ~~wherein routing said plurality of different types of traffic for said server comprises~~ comprising accessing a cluster via the single fabric and the single L2 connector.

31. (Currently Amended) The method according to claim 26, ~~wherein routing said plurality of different types of traffic for said servers comprises~~ comprising accessing a network via the single fabric and the single L2 connector.

32. (Currently Amended) The method according to claim 26, ~~wherein routing said plurality of different types of traffic for said servers comprises handling~~ comprising processing the plurality of different types of traffic via a single integrated convergent network controller chip coupled to the single fabric and an Ethernet connector of the plurality of servers.

33. (Currently Amended) A method for communication, the method comprising:

in a data center[[,]]:

accessing a storage system over a single fabric, wherein said single fabric comprises a single layer 2 (L2) connector coupled to a single integrated convergent network controller chip that is enabled to concurrently ~~handle~~ process a plurality of different types of traffic; and

accessing one or more of a cluster and a network over said single fabric.

34. (Currently Amended) The method according to claim 33, wherein said accessing [[to]] of said storage system, over said single fabric are performed over a single Ethernet connector of a server in the data center.

35. (Currently Amended) The method according to claim 33, wherein said single integrated convergent network controller chip coupled to the single Ethernet connector has a single Internet protocol (IP) address.

36. (Currently Amended) A system for communication, the system comprising:

[[an]] a single integrated ~~circuit~~ convergent network controller chip that enables concurrent hardware, firmware and software processing functionalities of a plurality of different types of traffic that are received via a single layer 2 (L2) connector that is communicatively coupled to a plurality of servers via a single fabric~~said integrated circuit~~.

37. (Currently Amended) The system of claim 36, wherein said single integrated ~~circuit~~ convergent network controller chip ~~is an integrated chip that~~ comprises a layer 2 network interface card (L2 NIC), a transmission control protocol (TCP) processor, an iSCSI processor, ~~and~~ a remote direct memory access (RDMA) processor and a Management Agent processor.

38. (Previously Presented) The system of claim 36, wherein said plurality of different types of network traffic comprises at least two of a network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

39. (Currently Amended) A method for communication, the method comprising:

concurrently providing, via a single integrated convergent network controller chip, hardware, firmware and software processing functionalities ~~handling via an integrated circuit~~ of a plurality of different types of traffic that are

received via a single layer 2 (L2) connector that is communicatively coupled to a plurality of servers via a single fabric~~said integrated circuit~~.

40. (Currently Amended) The method of claim 39, wherein said single integrated ~~circuit~~ convergent network controller chip ~~is an integrated chip that~~ comprises a layer 2 network interface card (L2 NIC), a transmission control protocol (TCP) processor, an iSCSI processor, ~~and~~ a remote direct memory access (RDMA) processor and a Management Agent processor.

41. (Previously Presented) The method of claim 39, wherein said plurality of different types of network traffic comprises at least two of a network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

42. (New) The communication system according to claim 1, wherein said single integrated convergent network controller chip comprises a single PHY coupled between said single Ethernet connector and said single MAC for handling said plurality of different types of network traffic for said integrated chip.

43. (New) The communication system according to claim 1, wherein said single integrated convergent network controller chip comprises a single frame parser for identifying each of said plurality of different types of network traffic.

44. (New) The communication system according to claim 43, wherein said frame parser parses incoming frames of said plurality of different types of network traffic into respective headers and data packets for subsequent data processing by the single integrated convergent network controller chip.

45. (New) The communication system according to claim 1, wherein said single fabric comprises a single backplane for transporting said plurality of different types of network traffic to the plurality of servers.

46. (New) The method according to claim 26, wherein said single integrated convergent network controller chip comprises a single PHY coupled between said single Ethernet connector and said single MAC for handling said plurality of different types of network traffic for said integrated chip.

47. (New) The method according to claim 26, wherein said single integrated convergent network controller chip comprises a single frame parser for identifying each of said plurality of different types of network traffic.

48. (New) The method according to claim 47, wherein said frame parser parses incoming frames of said plurality of different types of network traffic into respective headers and data packets for subsequent data processing by the single integrated convergent network controller chip.

49. (New) The method according to claim 26, wherein said single fabric comprises a single backplane for transporting said plurality of different types of network traffic to the plurality of servers.